

**DEFENSE LOGISTICS AGENCY (DLA)**  
**SMALL BUSINESS INNOVATION RESEARCH (SBIR) PROGRAM**  
**SBIR FY10.3 Proposal Submission Instructions**

Information about DLA can be found at <http://www.dla.mil/>. The DLA SBIR program is implemented, administered and managed by the DLA Operations Research and Resource Analysis Office (DORRA). General questions should be directed to:

DORRA  
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Use of e-mail is encouraged.

During the pre-release period (July 20 – August 16, 2010) contact the topic authors listed for each topic in the solicitation. To obtain answers to technical questions during the formal Solicitation period (August 17 – Sept. 15, 2010), visit <http://www.dodsbir.net/sitis>. For general inquiries or problems with the electronic submission, contact the DoD Help Desk at 1-866-724-7457 (8:00 am to 5:00 pm ET).

DLA's projected funding levels support a steady state of about seven (7) Phase I awards and two (2) Phase II awards annually. DLA reserves the right to limit awards under any topic.

**DLA SBIR PROGRAM PRINCIPLES**

DLA seeks to solicit high risk research and development proposals from the small business community. All selections shall demonstrate and involve a degree of technical risk where the technical feasibility of the proposed work has not yet been fully established. DLA prefers market-driven companies which can move technology into the commercial high volume market. Phase I proposals should demonstrate the feasibility of the proposed technology and the merit of a Phase II for a prototype or at least a proof-of-concept demonstration. Phase II selections will be strongly influenced on future market possibilities and commercialization potential demonstrated. The demonstration of commercialization potential is best evidenced by Phase II funding commitments, public or private, submitted as part of the Phase II proposal.

**SUBMISSION OF DLA SBIR PROPOSALS**

The entire proposal (which includes Cover Sheets, Technical Proposal, Cost Proposal, and Company Commercialization Report) must be submitted electronically via the DoD SBIR/STTR Proposal Submission Site (<http://www.dodsbir.net/submission>); DLA **WILL NOT** accept any proposals which are not submitted via this site. Do not send a hardcopy of the proposal. Hand or electronic signature on the proposal is also NOT required. If you experience problems uploading a proposal, call the DoD Help Desk 1-866-724-7457 (8:00 am to 5:00 pm EST). Selection and non-selection letters will be sent electronically via e-mail.

Proposals not conforming to the terms of this solicitation will not be considered.

## **FOREIGN NATIONALS**

If the offeror proposes to use a foreign national(s) [any person who is NOT a citizen or national of the United States, a lawful permanent resident, or a protected individual as defined by 8 U.S.C. 1324b(a)(3) – refer to section 2.15 of the DoD SBIR Program Solicitation 10.3 for definitions of “lawful permanent resident” and “protected individual”] as key personnel, the following information should be provided: country of origin, the type of visa or work permit under which they are performing and an explanation of their anticipated level of involvement on this project. You may be asked to provide additional information during negotiations in order to verify the foreign citizen’s eligibility to participate on a contract issued as a result of this solicitation.

## **PHASE I PROPOSAL PAGE LIMIT**

**DLA Phase I proposals have a 20-page limit (excluding the Cost Proposal and the Company Commercialization Report). Pages in excess of the 20-page limitation will not be considered in the evaluation of the proposal (including attachments, appendices, or references, but excluding the Cost Proposal and Company Commercialization Report).**

## **OPTION MUST BE INCLUDED AS PART OF PHASE I PROPOSAL**

Phase I contracts are expected to have a period of performance of roughly nine months and a maximum cost of \$100,000. The Phase I Option, which **must** be included as part of the Phase I proposal, covers activities over a period of up to four months and should describe appropriate initial Phase II activities that may lead to the successful demonstration of a product or technology. The Phase I Option proposal must be included within the 20-page limit for the Phase I proposal. Only Phase I companies selected for Phase II will be eligible to exercise the Phase I Option. DLA may or may not exercise the Phase I Option but the decision will be made prior to the end of the period of performance stated in the Phase I contract.

A firm-fixed-price-level-of-effort-term Phase I cost proposal (\$150,000 maximum) must be submitted in detail online. Proposers that participate in this solicitation must complete the Phase I Cost Proposal not to exceed the maximum dollar amount of \$100,000 and a Phase I option Cost Proposal not to exceed the maximum dollar amount of \$50,000. Phase I and Phase I option costs must be shown separately but may be presented side by side on a single Cost Proposal. The Phase I Cost Proposal must include a cost estimate for travel to Washington DC for a program review.

## **PHASE I KEY DATES**

10.3 Solicitation Pre-release	July 20 – August 16, 2010
10.3 Solicitation Open	August 17 – Sept 15, 2010
Phase I evaluations	October 2010
Phase I awards	February 2010

## **PHASE II PROPOSAL SUBMISSION**

DLA may invite Phase I performers to submit a Phase II proposal, not to exceed \$1,000,000 , based upon the success of the Phase I contract to meet the technical goals of the topic, as well as the overall merit based upon the criteria in section 4.3 of the SBIR 10.3 solicitation. Phase II proposals will be evaluated in accordance with the evaluation criteria provided in Section 4.3. Due to limited funding, DLA reserves the right to limit awards under any topic and only proposals considered to be of superior quality will be funded. The preferred contract types for DLA Phase II are firm-fixed-price-level-of-effort-term or cost plus fixed fee.

The DLA SBIR program, in its decision process for Phase II award selections, uses three criteria: (1) technical sufficiency; (2) a company's ability to demonstrate commercialization potential by attracting private-sector co-investment support during the performance of Phase II (the value that DLA places on this depends on the type of co-investment support (cash or support-in-kind), the amount of matching support, and timing of the matching support); (3) qualifications of the proposed principal/key investigators, supporting staff and consultants.

The entire Phase II proposal (which includes Cover Sheets, Technical Proposal, Cost Proposal, and Company Commercialization Report) must be submitted electronically via the DoD SBIR/STTR Proposal Submission Site (<http://www.dodsbir.net/submission>); DLA WILL NOT accept any proposals which are not submitted via this site. Do not send a hardcopy of the proposal. Hand or electronic signature on the proposal is also NOT required. If you experience problems uploading a proposal, call the DoD Help Desk 1-866-724-7457 (8:00 am to 5:00 pm EST). Selection and non-selection letters will be sent electronically via e-mail.

### **FAST TRACK**

DLA does not utilize Fast Track.

### **PHASE II ENHANCEMENT POLICY**

DLA does not utilize a Phase II enhancement process.

### **PHASE I SUMMARY REPORTS**

All Phase I award winners must submit a Phase I Final Summary Report at the end of their Phase I project. The Phase I summary report is an unclassified, non-sensitive, and non-proprietary summation of Phase I results that is intended for public viewing on the DLA web site. A summary report should not exceed 700 words, and should include the technology description and anticipated applications / benefits for government and or private sector use. It should require minimal work from the contractor because most of this information is required in the final technical report. This requirement for a final report will also apply to any subsequent Phase II contract.

### **DLA SUBMISSION OF FINAL REPORTS**

All final reports will be submitted in accordance with the Contract Data Requirements List (CDRL) as specified in the contract.

## **DLA SBIR 10.3 Topic Index**

DLA10-001      Advanced Technologies for Discrete-Parts Manufacturing

## DLA SBIR 10.3 Topic Descriptions

DLA10-001      TITLE: Advanced Technologies for Discrete-Parts Manufacturing

TECHNOLOGY AREAS: Air Platform, Ground/Sea Vehicles, Materials/Processes, Weapons

**OBJECTIVE:** The Defense Logistics Agency (DLA) seeks to provide responsive, best value supplies consistently to our customers. DLA continually investigates diverse technologies for manufacturing which would lead to the highest level of innovation in the discrete-parts support of fielded weapon systems (many of which were designed in the 1960's, 1970's and 1980's) with a future impact on both commercial technology and government applications. As such, advanced technology demonstrations for affordability and advanced industrial practices to demonstrate the combination of improved discrete-parts manufacturing and improved business methods are of interest. All these areas of manufacturing technologies provide potential avenues toward achieving breakthrough advances. Proposed efforts funded under this topic may encompass any specific discrete-parts manufacturing technology at any level resulting in a unit cost reduction. Research and Development efforts selected under this topic shall demonstrate and involve a degree of risk where the technical feasibility of the proposed work has not been fully established. Further, proposed efforts must be judged to be at a Technology Readiness Level of less than 6 -- system/subsystem model or prototype demonstration in a relevant environment -- but greater than 3 -- analytical and experimental critical function and/or characteristic proof of concept -- to receive funding consideration.

**DESCRIPTION:** DLA seeks drastically lower unit costs of discrete-parts support through manufacturing revolutions that also have applicability to low and high volume production from commercial sales. This will result in an improvement in the affordability of these innovations to DLA and its customers and the development of cost effective methods to sustain existing defense systems while potentially impacting the next generation of defense systems. The proposals must include and will be judged, in part, on an economic analysis of the expected market impact of the technology proposed. This topic seeks a revolution in the reduction of unit cost metrics. Incremental advancements will receive very little consideration. DLA seeks herein only projects that are too risky for ordinary capital investment by the private sector.

**PHASE I:** Determine, insofar as possible, the scientific, technical and commercial feasibility of the idea. Include, where appropriate, a process technology roadmap for implementing promising approaches for near term insertion in support of Department of Defense (DoD) systems, subsystems or component production.

**PHASE II:** Develop applicable and feasible prototype demonstrations for the approach described, and demonstrate a degree of commercial viability. Validate the feasibility of the innovative discrete-parts manufacturing process by demonstrating its use in the production, testing and integration of items for DLA. Validation would include, but not be limited to, system simulations, operation in test-beds, or operation in a demonstration system. A partnership with a current or potential supplier to DLA is highly desirable. Identify any commercial benefit or application opportunities of the innovation. Innovative processes should be developed with the intent to readily transition to production in support of DLA and its supply chains.

**PHASE III:** Technology transition via successful demonstration of a new process technology. This demonstration should show near-term application to one or more Department of Defense systems, subsystems or components. This demonstration should also verify the potential for enhancement of quality, reliability, performance and/or reduction of unit cost or total ownership cost of the proposed subject.

**Private Sector Commercial Potential:** Discrete-parts manufacturing improvements have a direct applicability to all defense system technologies. Discrete-parts manufacturing technologies, processes, and systems have wide applicability to the defense industry including air, ground, sea, and weapons technologies. There is leverage into the private sector industries as well as civilian sector relevance. Many of the technologies under this topic would be directly applicable to other DoD agencies, NASA, and any commercial manufacturing venue. Advanced technologies for discrete-parts manufacturing would directly improve production in the commercial sector resulting in reduced cost and improved productivity.

**REFERENCES:**

1. Transactions of the North American Manufacturing Research Institution/Society of Manufacturing Engineers (NAMRI/SME).

**KEYWORDS:** Manufacturing, machine tools, machining, material cutting, material forming, material additive processes, process/machine intelligence, manufacturing modeling, manufacturing simulation, manufacturing monitoring, manufacturing control systems.

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